

Safety Advisory Committee

July 11, 2014

1:30 – 3:00 PM

Minutes

Committee Member	Representing	Present
V. Potapenko, M. O. Leimer, J. Willen	Human Resources Advisors	
Blodgett, Paul M.	Environment, Health and Safety Division	
Bluhm, Hendrik	Chemical Sciences Division	X
Buonsanti, Raffaella	Materials Sciences Division	
Chernowski, John	Facilities Division	X
Christensen, John N.	Earth Sciences Division	X
Dardin, Steve	Physics Division	
Franaszek, Stephen	Genomics Division	
Giuntoli, Patricia	Computing Sciences Directorate	X
Greiner, Leo	Nuclear Science Division	
<i>vacant</i>	Environmental Energy Technologies Division	
Martin, Michael C.	Advanced Light Source Division	X
Sauter, Nicholas	Physical Biosciences Division	X
Seidl, Peter	Accelerator & Fusion Research Division; SAC Chair	X
Taylor, Scott E.	Life Sciences Division	X
Tomaselli, Ann	Information Technology Division	X
Thomas, Patricia M.	Safety Advisory Committee Secretary	X
van der Lippe, Henrik	Engineering Division	

Others Present: James Basore, Stephanie Collins, Julie Drotz, Pedro Estacio, Jim Floyd, Marshall Granados, Mike Kritscher, Bob Mueller, Andrew Peterson, Mark Scott, Greta Toncheva, Tammy Welcome, Bill Wells, Marty White, Mike Wisherop

Comments from the Chair – Peter Seidl

This was our first attempt to set up the SAC meeting for videoconference, using the new FUZE system. Patti Giuntoli tested the system from her office.

The Peer Review of the Facilities Division is expected to be completed within the next month.

ESH Documents Pipeline – Mike Wisherop

The safety policies in development that have had some change in status since the last meeting are the ones in green on the pipeline table:

Revision Type	Documents	Program/Policy	Significance	Status
Add requirement to offer exams to employees exposed to animal	ESH Manual	Health Services Program	E	Changes approved, posted in the RPM today.
Parking for expectant mothers	RPM	Parking Policy (P.S.)	D	Changes approved, will be posted in RPM next week.
Engineered nano-particles medical surveillance (DOE O 456.1)	ESH Manual	Health Services and Chemical Hygiene Programs	D	Changes approved, will be part of reformatted CHSP to be posted in August.
Traffic Safety Program and Policy Minor – Major Revision	RPM, ESH Manual	Traffic Safety	C	Adding processes for escorting larger vehicles to locations on site. Defining and prohibiting the use of unconventional vehicles used during work. Clarifications, and grammatical improvements. Significance analysis done.

Health Services will now offer medical surveillance services for all employees that work in animal facilities, rather than just animal handlers.

Expectant mothers can apply for temporary Blue Triangle parking permits through Human Resources.

Building Managers were asked about the frequency of non-construction large truck deliveries to their buildings. The number appears to be small enough to be managed by planning ahead and contacting Protective Services for escort. The high-value move process described in the crane program can be used when pilot cars are necessary.

Barbara Tuse has retired. The roof access policy, sharps hazards communication, and confined space programs are being re-assigned.

Work Planning and Control Soft Launch Update – Scott Taylor

Over the next month and a half, EHS Liaisons and Division Safety Coordinators will be working with key people in each Division to start entering data into the new Work Planning and Control System. Safety Advisory Committee Representatives are being asked to become “early adopters” of the new system to set an example and provide feedback. Volunteers have been recruited from SAC subcommittees to test the Integrated Hazards Analysis module and provide feedback on the controls and hazards. Jim Floyd is talking to Division Directors and encouraging their participation. Divisions will need to make some important decisions about who will be Project and Activity Leads, and the work qualification and authorizations process. JB McFarland and James Basore are creating a set of videos to explain how to use the Work Planning and Control System.

Laser Safety Program Proposed Changes – Greta Toncheva and Pedro Estacio

Joel Ager has been serving as the Interim Chair of the Laser Safety Subcommittee. Ian Sharp has agreed to be the new Chair. The following changes to the Subcommittee charter are recommended:

- The Subcommittee will consist of the Laser Safety Officer and four scientists as permanent members. There is no set term for membership. The Subcommittee plans to invite other laser users to participate in laser safety initiatives as needed. They want to encourage broader participation by scientists.
- The meeting participation will be in person or by alternative means, to reflect our increased use of videoconferencing.
- The Subcommittee's role will be advisory. They do not formally approve or disapprove policies.

Greta Toncheva recommends that LBNL adopt the 2014 version of the ANSI Z136.1 laser safety standard. The updated standard reflects current best practices. The standard includes about 30 new controls, including controls for ultrafast lasers, new maximum permissible exposure levels, clarification of Laser Safety Officer responsibilities, eye protection requirements for Class 3B and 4 lasers, outdoor laser use, and fire extinguishers for labs where spark ignition is a hazard. There are some changes in posting of warning signs; however, existing signs are “grandfathered” in for now. Entryway warning visible before entering the lab will be required for Class 3B laser labs. The Subcommittee has reviewed the new standard and obtained laser user feedback. Most of the controls have already been implemented at LBNL as best practices.

The ANSI standard says that laser eye exams “should be considered”. The eye exams are not required. The exam does not protect workers’ safety. The exam is used for comparison after eye injuries occur, and can help identify workers at risk, due to sensitivities to Ultra-Violet (UV) and near-UV radiation. The eye exam is recommended for users of class 3B and 4 lasers. It should only be required for chronic UV exposure or certain medical conditions. Principle Investigators can decide whether their workers need the eye exam. Persons who are at risk can be referred to an ophthalmologist. The exam will be provided for laser users who request it. If LBNL does not require as many eye exams, it is possible we will not be able to interest an optometrist in continuing to provide on-site exams.

On-the-Job Training and Training Database – James Basore

The 2009 HSS Audit found that:

- Clear and formalized institutional expectations regarding ongoing oversight of employees during on-the-job training was not provided.
- Clear and formalized expectations for the “competency expectations” to be demonstrated were not consistently evident.

An OJT Subcommittee was formed to work on these issues. OJT is one method to qualify workers. OJT improvements are being aligned with Work Planning and Control development. The OJT Subcommittee has developed a draft policy document and an on-line manual to serve as a resource for people who provide OJT. The OJT Subcommittee is requesting input to James Basore by August 11. For Work Planning and Control Risk Level 3 work, OJT would be required and course codes would be developed to track training completion. For Risk Level 2 work, OJT would be recommended. There are also non-safety benefits to providing OJT, to protect valuable experimental equipment from damage and to control the quality of the work. Workers will need to demonstrate their ability to perform critical tasks correctly before they are authorized to work without supervision. There is no standard way to document OJT.

The training database is actually a separate system from the Job Hazards Analysis database. As Work Planning and Control is implemented, the JHA database will be discontinued, but the Training database will remain. Berkeley Lab Training is being improved and integrated with Work Planning and Control. The Training database will include all types of training, not just safety training. It will be officially launched on August 5. The Training Profile will have a different look. There will be a list of all courses, and an integrated Training Calendar.

Electrical Safety Update – Mark Scott

The 277 Volt electrical shock incident at the General Purpose Lab construction site on November 19, 2013 revealed deficiencies in LBNL's systems for controlling subcontractor safety and communicating our expectations to subcontractors. An external investigation found that factors that contributed to causing the incident included a change in job scope that was not covered in the LOTO procedure or pre-job briefing, failure to implement "test before touch", and premature energization of a partially completed system to meet construction schedules. There was also a delay in reporting the incident. There was an HSS visit in May 2013. We are waiting for the report and possible fine. The HSS team did not find any additional deficiencies that LBNL had not identified.

In December 2013, there was an independent assessment of the Authority Having Jurisdiction (AHJ) implementation for electrical safety. The AHJ implementation is shared between Facilities (utilities infrastructure), Engineering (experimental equipment) and EHS (policy and safety program). The AHJ does not have authority to give waivers to codes and standards. The AHJ can interpret requirements, and grant findings of equivalency that must be communicated to DOE Berkeley Site Office (BSO). The assessment found that the Electrical Equipment Safety Program implemented by Engineering Division is effective, the Electrical Safety Program implemented by EHS Division is marginally effective, and the Facilities program has not been effective. The AHJ responsibility has been restructured to flow down from DOE to UCOP (Anita Gursahani), to LBNL Operations (Glenn Kubiak), to the Division Directors for Facilities, EHS, and Engineering. A management-level Electrical Safety Advisory Board has been formed.

In response to the various assessment findings, an integrated Electrical Safety Improvement Plan has been developed. Progress will be tracked by the Office of Institutional Assurance. This year, the emphasis will be on improving safety for Qualified Electrical Workers through updating Chapter 8 of the EHS Manual to incorporate proactive controls, improved education, and safety culture. The changes will be based on the 2012 version of NFPA Standard 70E and the DOE handbook on electrical safety. There will be 4 levels of Qualified Electrical Workers. Defibrillators (AEDs) will be incorporated in safety watch. There will be improved training for breaker switching. There will be Electrical Safety Advocates (similar to ergo advocates) to help promote safety culture. We will start with the people identified as electrical equipment surveyors. There will also be Division Electrical Safety Officers for the Divisions that are identified as "power users".

Mark Scott introduced Stephanie Collins, the new Deputy Electrical Safety Officer at EHS. Stephanie has over 24 years of experience in electrical safety in the Navy and power plants. EHS is also hiring an instructor and field coach for the Qualified Electrical Workers.

There were questions about how LBNL interacts with subcontractors. The subcontractors' QEWs are identified by person and program – if a QEW changes employers, they are re-evaluated. LBNL inspects subcontractors' electrical work. We need to have a more explicit roll-down of NFPA 70E requirements to subcontractors. Facilities will be hiring more inspectors, and there are also third-party inspectors hired by Project Managers. It is more difficult to have clear AHJ designation of responsibilities at off-site facilities. Generally, any equipment under LBNL purchase order or specifications is under our jurisdiction. There is no AHJ designation on campus.

Closing Remarks

The Mechanical/Pressure Safety Subcommittee may have a report ready for the August meeting.

The meeting was adjourned at 3:00 PM
Respectfully submitted, Patricia M. Thomas, SAC Secretary